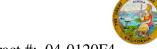
#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

69.28 File #:

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-011001 Address: 333 Burma Road **Date Inspected:** 07-Oct-2009

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Weld Procedures Followed: Electrode to specification:** No Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component: OBG Deck Panel** 

### **Summary of Items Observed:**

On this day Caltrans OSM Quality Assurance (QA) Inspector Daniel Barrentine was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhen Hua Port Machinery Company (ZPMC) at Chang Xing Island in Shanghai, China. QA Inspector observed and/or found the following:

The QA inspector performed conventional Ultrasonic (UT) Inspection on Deck Panel tack weld areas. The inspection is preliminary prior to using the Phased Array (PAUT) testing system to verify indications found with conventional Ultrasonic testing. The QA inspector performed UT on Deck Panel DP 374-001, 5 ribs, 10 welds, 280 total tack welds inspected.

- Weld 1 scanned 28 locations with 5 indications.
- Weld 2 scanned 28 locations with 2 indications.
- Weld 3 scanned 28 locations with 6 indications.
- Weld 4 scanned 28 locations with 1 indication.
- Weld 5 scanned 28 locations with 1 indication.
- Weld 6 scanned 28 locations with 1 indication.
- Weld 7 scanned 28 locations with 1 indication.
- Weld 8 scanned 28 locations with 1 indication.
- Weld 9 scanned 28 locations with 1 indication.
- Weld 10 scanned 28 locations with 1 indication.

# WELDING INSPECTION REPORT

(Continued Page 2 of 2)

QA Inspector performed initial Phased Array Ultrasonic Testing (PAUT) following the guide lines of UT procedure titled "Phased Array Ultrasonic Testing for the Detection and Sizing of Suspected Planar Discontinuities (Cracks) in PJP Welds, # UT 04-0120F4 PJP Rib Weld" after conventional UT was performed on tack welded areas of the Partial Joint Penetration (PJP) welds joining U-Ribs to Deck Plate. The Deck Panels examined are as follows:

DP374-001: 280 tack weld locations found compliant and 5 tack weld locations found non-compliant.

Tack weld locations found non-compliant are marked on U-Rib and Deck Plate for ZPMC's reference for repair. See Caltrans U-rib to Deck Panel- Tack Weld Assessment sheets dated 7th October, 2009 for further information on PAUT inspections.

# **Summary of Conversations:**

No relevant conversations.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Barrentine, Daniel	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer